



Profit water motor gong, type WMG, is a hydraulically automated sound device actuated by water flow. The gong is intended to use on alarm check valves in fire protection sprinkler systems.

### Characteristics

- In- and outdoor use.
- Self contained, line pressure operated.
- Quick response 90 dB sound level.
- Wheaterproof anti-corrosion protected.
- Connections:
  - Inlet ¾" NPT.
  - Outlet drain: 1" NPT.
- Suitable for wall thickness up to 434 mm.
- Approved by UL when used in combination with Profit brand UL-approved alarm valves.

### Working pressure

0,05 to 2,07 MPa / 0,5 to 20,7 bar / 300 psi.

### Working temperature

+1°C to +87°C.

### Weight

2,270 kg.

### Approvals

- UL listed.
- FM approved.
- CE certified to EN12259 - 4:2000 / A1:2001.

### Operation

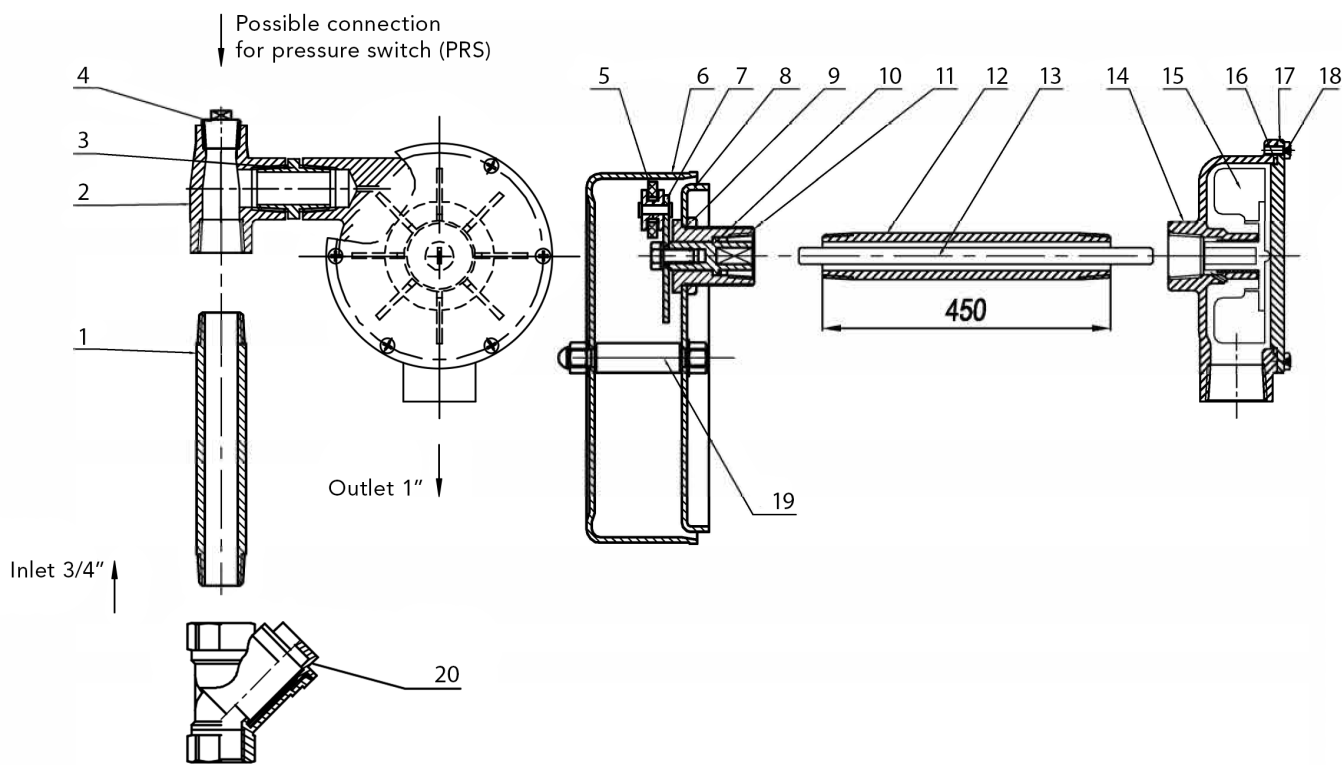
When an alarm valve is activated, water flows through the valve's trim, discharges to a strainer and into the water motor inlet. From the inlet, the water flows through a nozzle which directs the stream to the impeller. The stream turns the impeller and drive shaft, causing the striker arm to rotate, thus producing a continuous alarm. The water is discharged through a 1" (25 mm) drain outlet at the bottom of the impeller housing. The discharged water must be piped through the wall to atmosphere or to a suitable open drain.



### Box content

- Water motor + trim.
- Gong.
- Drive shaft, L = 490 mm.
- Drive shaft sleeve, L = 450 mm.
- Y-strainer Inlet ¾".
- Inlet pipe.

**Material specifications**



Part N°	Part name	Material
1	Inlet pipe	Stainless steel, SS304
2	Tee-junction	Stainless steel, SS304
3	¾ nipple	Stainless steel, SS304
4	½ plug	Stainless steel, SS304
5	Striker ring	Synthetic nylon
6	Gong	Aluminum alloy plate
7	Striker arm	Stainless steel, SS304
8	Gong frame	Aluminum plate
9	Round nut	Stainless steel, SS304
10	Coupling	POM
11	Striker shaft bearing	Aluminum alloy
12	¾ pipe	Carbon steel
13	Drive shaft sleeve	Stainless steel, SS304
14	Water motor	Cast aluminum
15	Impeller	POM
16	O-Ring	NBR
17	Cover	Stainless steel, SS304
18	Screw	Stainless steel, A2-70
19	Back shaft	Aluminum alloy
20	Y-strainer	Brass

## Marking



## Storage and handling

- Upon receipt, carefully check the water motor gong on any damage during shipment.



## Installation

- Inspection before installation. Checklist:
  1. Select the installation location and cut an opening of minimal 28mm through the wall to accept a 3/4 in steel support pipe.
  2. Cut the 3/4" steel support pipe (12) to a length equal to the wall thickness plus 16 mm if it is possible taping both ends 3/4" NPT-thread.
  3. Measure and cut the drive shaft (13) so that its length equals the support pipe length plus 40 mm. Remove all burrs and sharp edges.
  4. Insert the drive shaft (13) into the striker shaft bearing (11) of the gong and rotate by hand to confirm that the striker arm moves freely and can strike the gong.
  5. Insert the support pipe through the wall and into the gong. Position the gong against the wall so that it sits flush.
  6. Remove the cover (17) and the sealing (16) of the watermotor gong, and remove the impeller (15).
  7. Turn the water motor (14) onto the support pipe (12) using the 3/4" NPT connection, position the 1" NPT female drain outlet facing downward.
  8. Insert the impeller, make sure the driver shaft is inserted in the impeller.
  9. Install the cover (17) and the sealing (16) of the watermotor gong, torque the screws alternating.
  10. Turn the inlet pipe (1), and the 3/4" strainer (20) into the Tee (2).
  11. Connect the inlet below the strainer water motor body to the Alarm line of the dry or wet alarm post. Depending on the installation, this will be the retard chamber, adaptor piece, pressure switch, and/or pressure gauge as required by the system trim arrangement. Look to the specific technical datasheet of the alarm valve to see the further instructions.
  12. Connect a size 1" drainpipe to the 1" NPT female drain outlet and route the discharge to atmosphere or to a suitable open drain.
  13. Test the assembly and verify correct operation. Ensure the system is returned to normal operating condition after testing.



## Maintenance

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of the National Fire Protection Association (e.g., NFPA 25), in addition to the standards of any authority having jurisdiction. The installing contractor or product manufacturer should be contacted relative to any questions. It is recommended that automatic sprinkler systems be inspected, tested, and maintained by a qualified Inspection Service in accordance with local requirements and/or national codes.

## GENERAL INFO

- Installers should be trained or experienced to install and understand the product.
- Before installation, carefully check the product on any damage during shipment or handling.
- Read and understand all technical datasheets and installation instructions before attempting to install, remove or adjust any Profit products.
- Check if the pressure rating of the product is compatible with the service conditions.
- Depressurise and drain the sprinkler installation system before attempting to install, remove or adjust any Profit products.
- Never work on piping systems that are pressurised and / or filled with water or pressurised air.
- Piping Logistics reserves the right to change specifications, designs and / or standard equipment without notice and without incurring in any obligations.
- Use the necessary Personal Protection Equipment (PPE) to avoid personal injury (helmet, safety shoes, goggles and gloves).



**Failure to follow these instructions could result in property damage, serious injury or death.**

**Our product must always be stored in closed and dry environments. Once installed on an above ground sprinkler system, they require no specific maintenance.**

## REVISION TABLE

Date	△	Notes
14/05/2025		New design.
16/12/2025	E	Page 1 - New product picture.
02/02/2026	F	Page 2 - Additional material information.
06/05/2026	G	Page 1, 2 & 3 - Additional product information.